NHDES

The State of New Hampshire Department of Environmental Services



AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS

		Deviation					
	Actual	Normal	from	Percent			
	Rainfall	Rainfall	Normal	of			
	(inches)	(inches)	(inches)	Normal			
Coastal Drainage: R	ockingham, Straff	ord counties					
four month	14.93	14.78	0.15	101%			
six month	28.05	22.82	5.23	123%			
nine month	36.75	33.20	3.55	111%			
twelve month	52.07	42.86	9.21	121%			
Southern Interior: Be	elknap, Hillsboroud	gh, Merrimack coun	ties				
four month	12.86	14.99	-2.13	86%			
six month	24.34	22.55	1.79	108%			
nine month	32.06	32.61	-0.55	98%			
twelve month	47.26	42.29	4.97	112%			
South Western: Che	shire, Sullivan cou	ınties					
four month	12.90	15.39	-2.49	84%			
six month	21.60	22.90	-1.30	94%			
nine month	28.96	32.77	-3.81	88%			
twelve month	42.27	42.37	-0.09	100%			
Milita Massatala a							
White Mountain: Car			0.00	050/			
four month	15.88	16.78	-0.90	95%			
six month	25.74	24.77	0.97	104%			
nine month	33.12	34.49	-1.37	96%			
twelve month	48.76	43.37	5.39	112%			
North Country: Coos	county						
four month	16.31	18.09	-1.78	90%			
six month	27.14	25.84	1.30	105%			
nine month	34.85	34.85	1.67	100%			
twelve month	51.53	43.01	8.52	120%			

four month period : June 2007 - September 2007 six month period : April 2007 - September 2007 nine month period : January 2007 - September 2007 twelve month period: October 2006 - September 2007

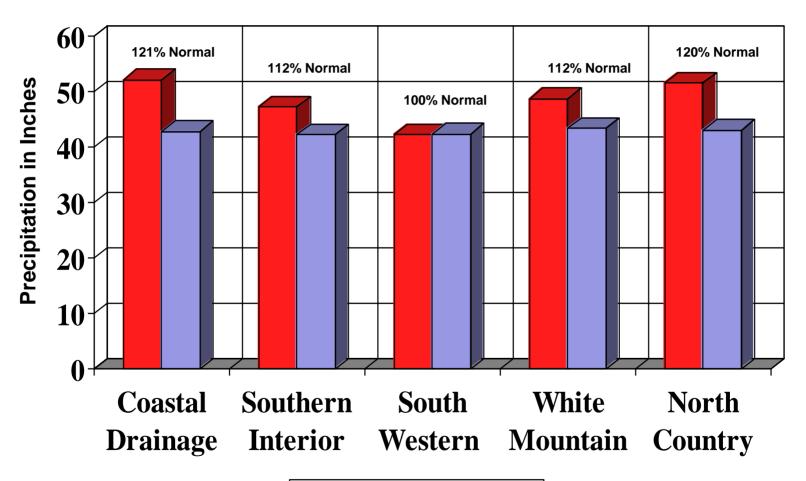
Source: Northeast River Forecast Center, NH Des Dam Bureau

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-7894 • TDD Access: Relay NH 1-800-735-2964

DES Web site: www.des.nh.gov

TWELVE MONTH AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS from October 2006 through September 2007







MONTHLY PRECIPITATION DATA FOR N.H COUNTIES

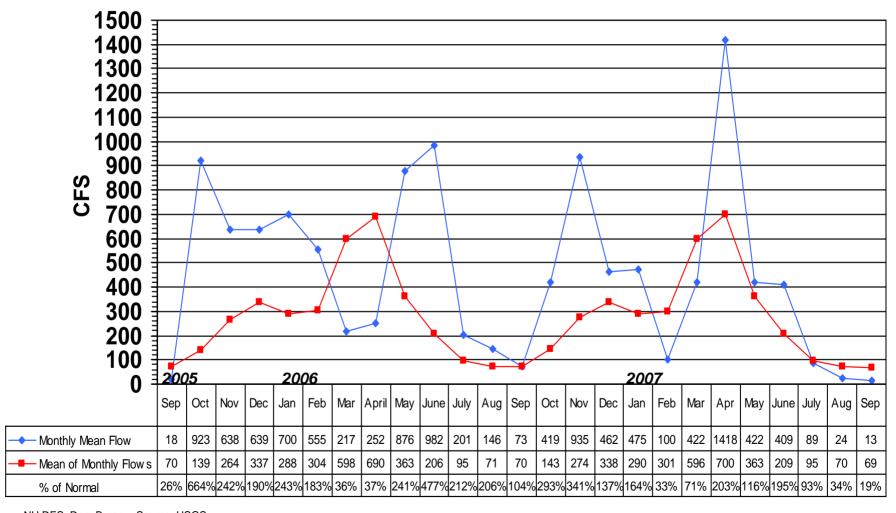
			740000000000										
		2006			2007								
		OCT	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT
Coastal drainage	7				0,			7.1.1.1.		00.12		7.00	<u> </u>
STRAFFORD	<u>2</u> actual	6.27	5.53	3.60	3.02	1.59	3.94	9.98	3.39	3.14	7.11	2.44	4.34
OTTOTAL	normal	3.12	3.12	3.12	3.12	3.12	4.02	4.39	3.88	3.77	3.75	3.69	3.77
	deviation	3.15	2.41	0.48	-0.10	-1.53	-0.08	5.59	-0.49	-0.63	3.36	-1.25	0.57
ROCKINGHAM	actual	6.44	5.96	2.84	2.94	1.54	4.37	8.92	3.95	3.33	5.15	1.47	2.88
ROCKINOLIAM	normal	3.32	3.32	3.32	3.32	3.32	3.86	4.12	3.69	3.68	3.59	3.55	3.76
	deviation	3.12	2.64	-0.48	-0.38	-1.78	0.51	4.80	0.26	-0.35	1.56	-2.08	-0.88
Average	actual	6.36	5.75	3.22	2.98	1.57	4.16	9.45	3.67	3.24	6.13	1.96	3.61
Average	normal	3.22	3.22	3.22	3.22	3.22	3.94	4.26	3.79	3.73	3.67	3.62	3.77
	deviation	3.14	2.53	0.00	-0.24	-1.66	0.22	5.20	-0.12	-0.49	2.46	-1.67	-0.16
Cauthara Interior		3.14	2.00	0.00	-0.24	-1.00	0.22	3.20	-0.12	-0.49	2.40	-1.07	-0.10
Southern Interior		C 07	F 25	0.50	2.00	4.54	4.47	0.00	2.00	0.40	F 00	0.00	2.20
HILLSBOROUGH		6.87	5.35	2.59	3.08	1.54 3.60	4.17	8.09 3.89	3.96	3.18 3.75	5.33 3.75	0.93	3.30 3.67
	normal	3.60	3.60	3.60	3.60		3.88		3.81			3.78	
MERRIMACK	deviation	3.27 7.76	1.75 4.84	-1.01 3.79	-0.52 2.93	-2.06	0.29	4.20 8.53	0.15 3.59	-0.57 2.68	1.58	-2.85 1.71	-0.37
WERKIWACK	actual					1.45	3.95				4.83		3.33
	normal	3.16	3.16	3.16	3.16	3.16	3.51	3.66	3.84	3.66	3.81	3.78	3.52
DELIZNAD	deviation	4.60	1.68	0.63	-0.23	-1.71	0.44	4.87	-0.25	-0.98	1.02	-2.07	-0.19
BELKNAP	actual	6.59	4.54	3.26	2.04	1.15	2.84	7.49	2.79	2.47	5.40	2.03	3.39
	normal	2.92	2.92	2.92	2.92	2.92	3.42	3.66	3.82	3.79	4.08	3.84	3.55
^	deviation	3.67	1.62	0.34	-0.88	-1.77	-0.58	3.83	-1.03	-1.32	1.32	-1.81	-0.16
Average	actual .	7.07	4.91	3.21	2.68	1.38	3.65	8.04	3.45	2.78	5.19	1.56	3.34
	normal	3.23	3.23	3.23	3.23	3.23	3.60	3.74	3.82	3.73	3.88	3.80	3.58
	deviation	3.85	1.68	-0.01	-0.54	-1.85	0.05	4.30	-0.38	-0.96	1.31	-2.24	-0.24
South Western		0.00	0.04		0.04	4.00		= 10		0.04	4.40	4.50	0.00
CHESHIRE	actual .	6.02	3.91	2.39	2.91	1.22	2.77	5.49	2.66	2.94	4.49	1.52	3.20
	normal	3.28	3.28	3.28	3.28	3.28	3.60	3.64	3.97	3.81	4.03	4.05	3.57
	deviation	2.74	0.63	-0.89	-0.37	-2.06	-0.83	1.85	-1.31	-0.87	0.46	-2.53	-0.37
SULLIVAN	actual	6.99	4.44	2.87	3.24	1.64	2.94	6.23	3.02	3.29	5.50	1.77	3.09
	normal	3.12	3.12	3.12	3.12	3.12	3.33	3.52	3.90	3.75	4.00	3.93	3.63
	deviation	3.87	1.32	-0.25	0.12	-1.48	-0.39	2.71	-0.88	-0.46	1.50	-2.16	-0.54
Average	actual	6.51	4.18	2.63	3.08	1.43	2.86	5.86	2.84	3.12	5.00	1.65	3.15
	normal	3.20	3.20	3.20	3.20	3.20	3.47	3.58	3.94	3.78	4.02	3.99	3.60
	deviation	3.31	0.98	-0.57	-0.13	-1.77	-0.61	2.28	-1.10	-0.67	0.98	-2.35	-0.46
White Mountain													
GRAFTON	actual	7.39	3.81	3.68	2.55	2.18	3.29	5.13	3.24	3.08	5.67	3.41	3.69
	normal	2.92	2.92	2.92	2.92	2.92	3.60	3.73	4.01	4.26	4.34	4.42	4.05
	deviation	4.47	0.89	0.76	-0.37	-0.74	-0.31	1.40	-0.77	-1.18	1.33	-1.01	-0.36
CARROLL	actual	8.02	5.08	3.30	2.31	1.58	2.86	8.10	3.24	3.23	6.35	3.15	3.18
	normal	3.00	3.00	3.00	3.00	3.00	4.01	4.05	4.19	4.14	4.25	4.21	3.88
	deviation	5.02	2.08	0.30	-0.69	-1.42	-1.15	4.05	-0.95	-0.91	2.10	-1.06	-0.70
Average		7.71	4.45	3.49	2.43	1.88	3.08	6.62	3.24	3.16	6.01	3.28	3.44
Average	actual	1.7											
Average	actual normal	2.96	2.96	2.96	2.96	2.96	3.81	3.89	4.10	4.20	4.30	4.32	3.97
Average				2.96 0.53	2.96 -0.53	2.96 -1.08	3.81 -0.73	3.89 2.73	4.10 -0.86	4.20 -1.05	4.30 1.72	4.32 -1.04	3.97 -0.53
North Country	normal	2.96	2.96										
	normal	2.96	2.96 1.49										-0.53
North Country	normal deviation	2.96 4.75	2.96	0.53	-0.53	-1.08	-0.73	2.73	-0.86	-1.05	1.72	-1.04	

Source: Northeast River Forecast Center, NH DES Dam Bureau

LAMPREY RIVER near NEWMARKET NH Gage# 01073500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

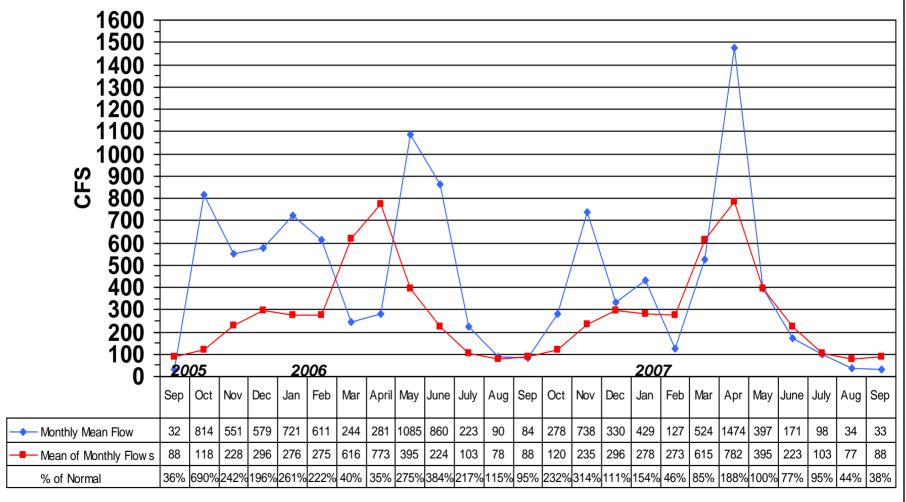


NH DES, Dam Bureau, Source: USGS

SOUHEGAN RIVER at MERRIMACK NH Gage# 01094000



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

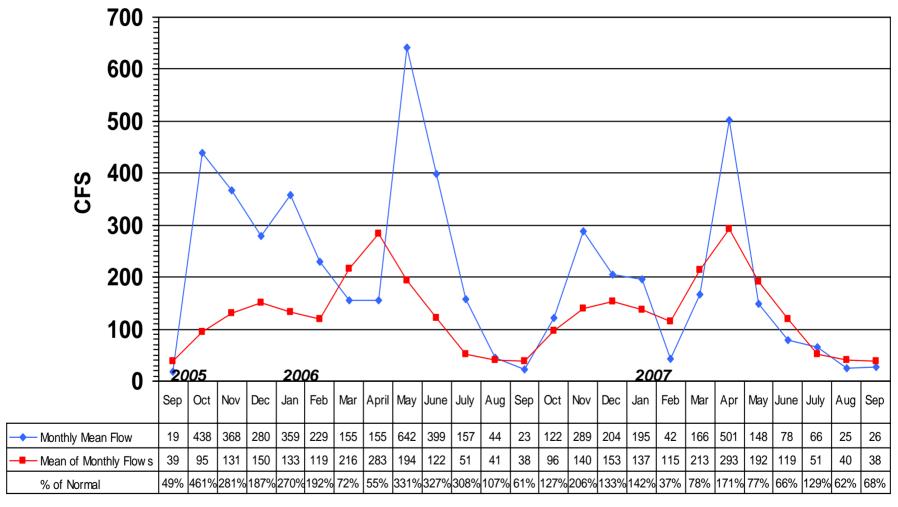


NH DES, Dam Bureau, Source: USGS

SOUCOOK RIVER at PEMBROKE ROAD near CONCORD NH, Gage# 01089100



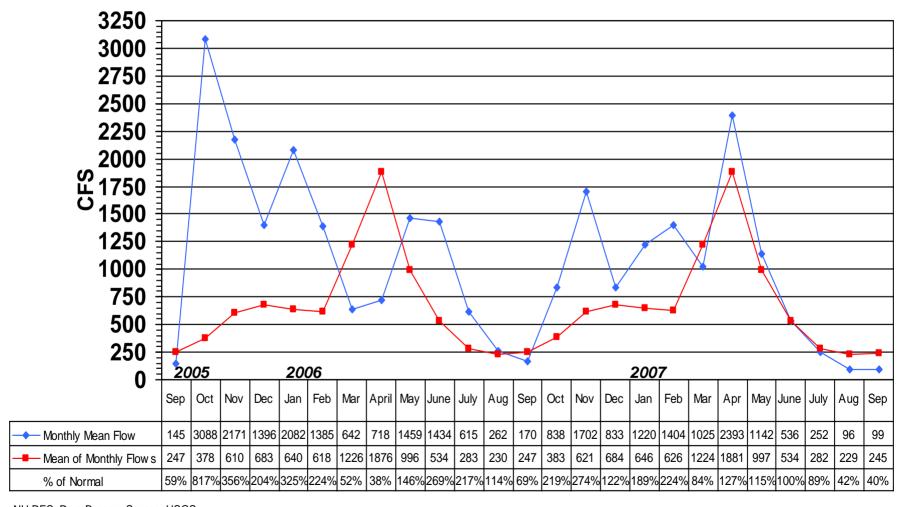
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



ASHUELOT RIVER at HINSDALE NH Gage# 01161000



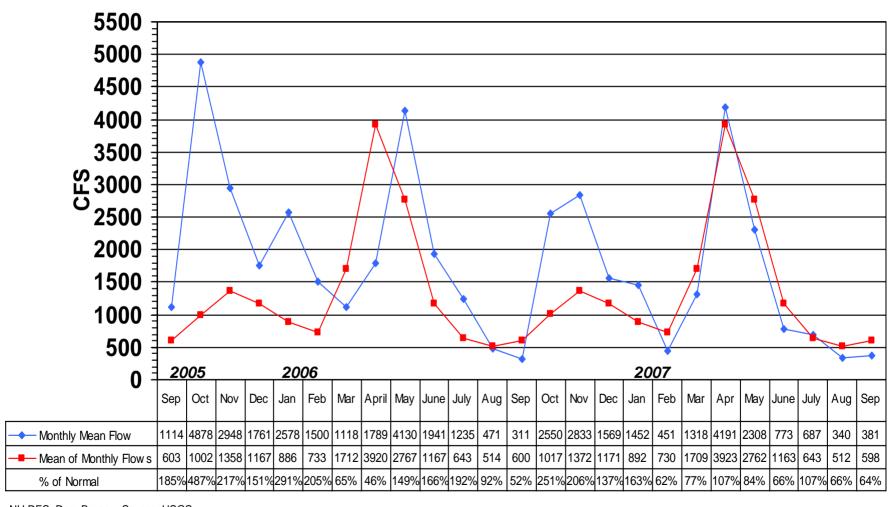
MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



PEMIGEWASSET RIVER at PLYMOUTH NH Gage# 01076500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



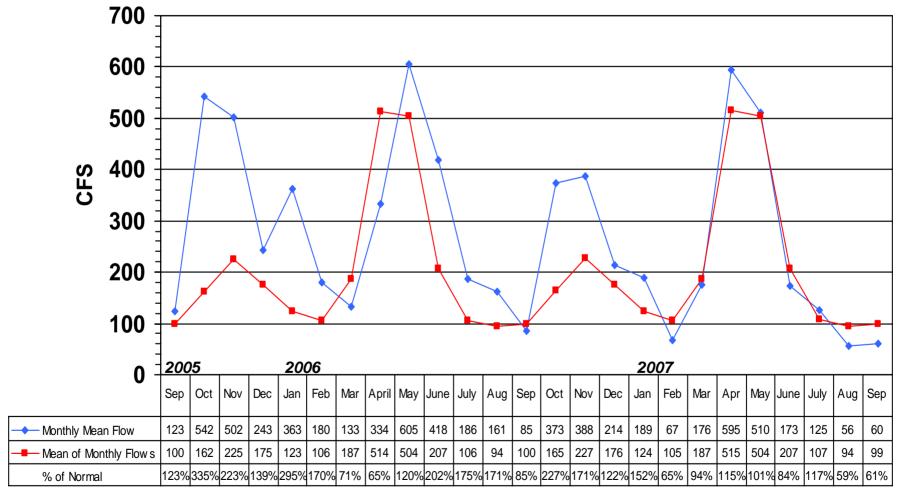
NH DES, Dam Bureau, Source: USGS

AMMONOOSUC RIVER at BETHLEHEM JUNCTION NH Gage# 01137500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

This station replaces gage# 01137000 which was discontinued by DES at the end of Sept 2004



NH DES, Dam Bureau, Source: USGS

STREAMFLOW DATA FOR SELECTED NH STATIONS AS OF OCTOBER 9, 2007

	\leq	
1	57	SEN TOWNS
140	nvir	onmental Services

Station number Station name	Est. Mean Flow (cfs)	Long Term Median Flow	99% Flow (cfs)	7Q10 Flow (cfs)	Lowest Period of Record Daily Flow (cfs)	% of Median	Below 0.99 Flow?	Below 7Q10 Flow?	Below Record Flow?
Androscoggin River Basin									
01052500 Diamond River near Wentworth Location, NH	119	135	22	16	6.8	88%	FALSE	FALSE	FALSE
01053500 Androscoggin River at Errol, NH	1,650	1,540	500	451	0	107%	FALSE	FALSE	FALSE
01054000 Androscoggin River near Gorham, NH	1,830	1,880	1300	1310	795	97%	FALSE	FALSE	FALSE
Saco River Basin									
01064500 Saco River near Conway, NH	176	298	105	97	66	59%	FALSE	FALSE	FALSE
01064801 BEARCAMP RIVER AT SOUTH TAMWORTH, NH	22	35	6	4.8	4.5	63%	FALSE	FALSE	FALSE
Piscataqua River Basin 01072800 COCHECO RIVER NEAR ROCHESTER, NH	24	33			2.2			#VALUE!	FALSE
01073500 LAMPREY RIVER NEAR NEWMARKET, NH	18	56	7	5		32%	FALSE	FALSE	#VALUE!
Merrimack River Basin 01074520 EAST BRANCH PEMIGEWASSET RIVER AT LINCOLN, NH	119	152		49	46	78%	FALSE	FALSE	FALSE
01075000 PEMIGEWASSET RIVER AT WOODSTOCK, NH	215	209		56		103%	FALSE	FALSE	
01076000 BAKER RIVER NEAR RUMNEY, NH 01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH	133 370	66 464		15 118	 45	202% 80%	FALSE FALSE	FALSE FALSE	FALSE
01078000 PEMIGEWASSET RIVER AT PLTMOOTH, NH 01078000 SMITH RIVER NEAR BRISTOL, NH	120	31		6.2	2.7	387%		FALSE	FALSE
01081000 WINNIPESAUKEE RIVER AT TILTON, NH	272	353		136	48	77%	FALSE	FALSE	FALSE
01081500 MERRIMACK RIVER AT FRANKLIN JUNCTION, NH	1,210	1,340		551		90%	TALOL	FALSE	17,LUL
01082000 CONTOOCOOK RIVER AT PETERBOROUGH, NH	10	23		6.3		43%	FALSE	FALSE	
01085000 CONTOOCOOK RIVER NEAR HENNIKER, NH	90			37			FALSE	FALSE	
01085500 CONTOOCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH	73	167		39		44%	FALSE	FALSE	
01086000 WARNER RIVER AT DAVISVILLE, NH	95	40		5.3		238%	FALSE	FALSE	
01087000 BLACKWATER RIVER NEAR WEBSTER, NH	28			13.7			FALSE	FALSE	
01090800 PISCATAQUOG RIVER BL EVERETT DAM, NR E WEARE, NH	16			1.2			FALSE	FALSE	
01091500 PISCATAQUOG RIVER NEAR GOFFSTOWN, NH	71			8.8		====	FALSE	FALSE	
01092000 MERRIMACK R NR GOFFS FALLS, BELOW MANCHESTER, NH	1,450 36	1,830 46		644 12.9	98*	79% 78%	ENICE	FALSE FALSE	
01094000 SOUHEGAN RIVER AT MERRIMACK, NH	30	40		12.9		78%	FALSE	FALSE	
Connecticut River Basin									
01129200 CONNECTICUT R BELOW INDIAN STREAM NR PITTSBURG, NH	275	468		42	30	59%	FALSE	FALSE	FALSE
01129500 CONNECTICUT RIVER AT NORTH STRATFORD, NH	746	879		176	108	85%	FALSE	FALSE	FALSE
01131500 CONNECTICUT RIVER NEAR DALTON, NH	1,350	1,470		389	115	92%	FALSE	FALSE	FALSE
01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH	74	97		28	21	76%	FALSE	FALSE	FALSE
01138500 CONNECTICUT RIVER AT WELLS RIVER, VT	2,950	2,650	200+	690	152*	111%		FALSE	
01144500 CONNECTICUT RIVER AT WEST LEBANON, NH 01152500 SUGAR RIVER AT WEST CLAREMONT, NH	4,110 201	3,220 108	380* 40	902 38	82* 14	128% 186%	FALSE	FALSE FALSE	FALSE
01152500 SUGAR RIVER AT WEST CLAREMONT, NH 01154500 CONNECTICUT RIVER AT NORTH WALPOLE, NH	7,460	3,820	260*	1058	115*	195%	FALSE	FALSE	FALSE
01158000 ASHUELOT RIVER BELOW SURRY MT DAM, NEAR KEENE, NH	7,460	3,620	4.5	2.7	0.4	30%	FALSE	FALSE	FALSE
01158600 OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH	3.4	23	1.6	1.1	0.3	15%		FALSE	FALSE
01160350 ASHUELOT RIVER AT WEST SWANZEY, NH	143	182	32			79%			_

^{*}Flow duration and record low mean daily flow significantly affected by reservoir operations

Source: USGS, NH DES

SUMMARY	Below	Below	Below
	0.99	7Q10	Record
	Flow?	Flow?	Flow?
FALSE =	28	32	17
TRUE =	0	0	0

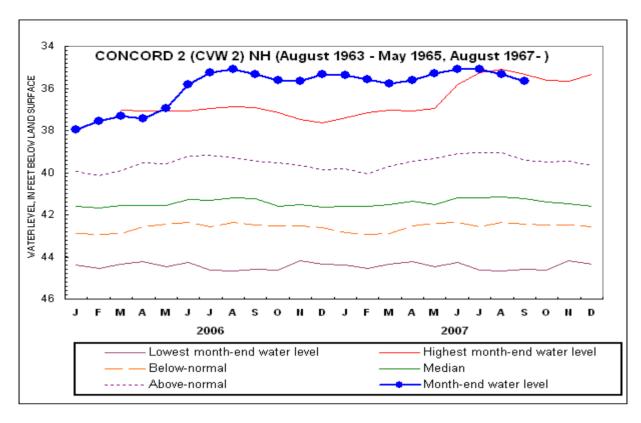
^{**}Estimated

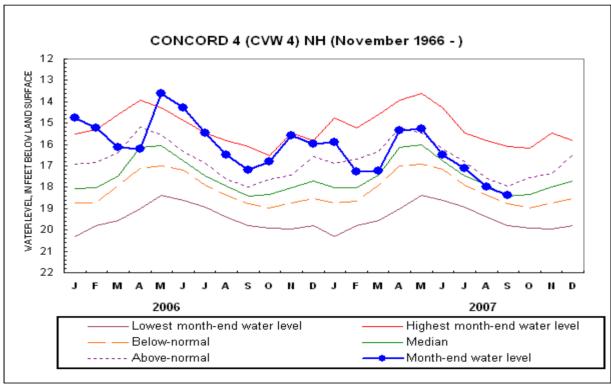
New Hampshire Groundwater Levels for September 2007

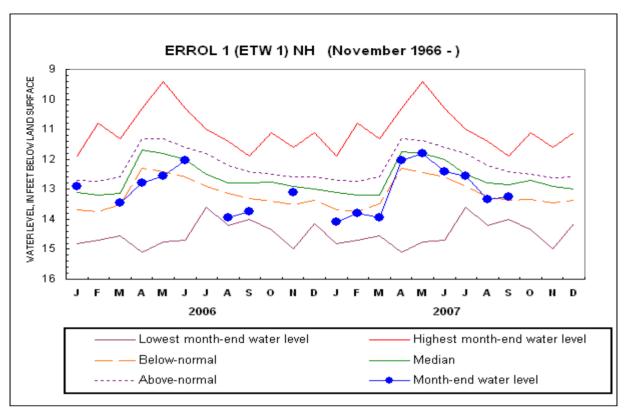


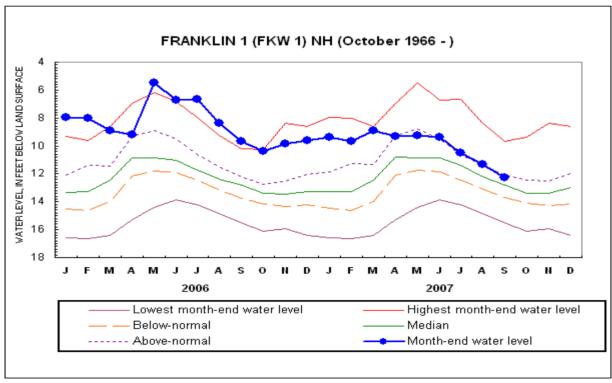
	START OF	WATER LEVEL BELOW	NET CHANGE	NET CHANGE			DEPARTURE FROM	PERCENT OF	
<u>WELL</u>	RECORD	SURFACE DATUM (ft)	IN ONE MONTH (ft)	IN ONE YEAR (ft)	<u>MEDIAN</u>	RANGE (ft)	MONTHLY MEDIAN (FT)	<u>RANGE</u>	<u>STATUS</u>
ALBANY 14	1995	7.59	-0.29	-0.26	7.03	0.88	-0.56	-63.6	BELOW NORMAL
ALBANY 15	1995	9.46	-0.21	-0.11	8.91	0.77	-0.55	-71.4	BELOW NORMAL
BARNSTEAD 10	1995	3.22	-0.12	-0.20	3.18	0.25	-0.04	-16.0	NORMAL
CAMPTON 34	1988	14.10	-0.23	-0.09	13.85	0.66	-0.25	-37.9	BELOW NORMAL
COLEBROOK 73	1995	7.05	+0.78	+0.75	7.98	3.20	+0.93	29.1	ABOVE NORMAL
CONCORD 2	1963	35.65	-0.33	-0.33	41.24	5.92	+5.59	94.4	ABOVE NORMAL
CONCORD 4	1966	18.39	-0.41	-1.18	18.40	2.32	+0.01	0.4	NORMAL
DEERFIELD 46	1984	39.02	-0.48	-0.53	39.07	0.58	+0.05	8.6	NORMAL
ENFIELD 30	1990	7.98	-0.88	-2.38	8.10	2.50	+0.12	4.8	NORMAL
ERROL 1	1966	13.2	+0.1	+0.5	12.90	1.1	-0.4	-34.8	NORMAL
FRANKLIN 1	1966	12.26	-0.94	-2.58	12.81	3.13	+0.55	17.6	NORMAL
GREENFIELD 75	1995	56.94	-0.64	-1.30	61.79	3.45	+2.15	62.3	ABOVE NORMAL
HOOKSETT 5	1965	50.03	-0.58	-1.64	49.32	1.53	-0.71	-46.4	BELOW NORMAL
KEENE 2	1963	4.20	+0.20	-0.31	4.66	2.52	+0.46	18.3	NORMAL
LANCASTER 1	1966	2.40	+0.10	-0.10	2.20	0.60	-0.20	-33.3	BELOW NORMAL
LEE 1	1953	31.20	-0.38	-0.79	31.59	1.18	+0.39	33.1	ABOVE NORMAL
LISBON 19	1990	14.63	+0.20	-0.06	14.60	0.36	-0.03	-8.3	NORMAL
NASHUA 218	1964	28.25	-0.18	-0.15	29.08	1.50	+0.83	55.3	NORMAL
NEW DURHAM 53	1986	20.03	-0.13	-0.47	19.68	1.05	-0.35	-33.3	NORMAL
NEW LONDON 1	1947	13.11	-1.32	-1.63	12.94	2.17	-0.17	-7.8	NORMAL
NEWPORT 3	1995	7.56	-0.42	-0.94	6.82	0.70	-0.74	-105.7	BELOW NORMAL
NEWPORT 6	1995	7.67	-0.43	-0.94	6.86	0.75	-0.81	-108.0	BELOW NORMAL
OSSIPEE 38	1995	35.59	-0.51	-0.87	35.90	1.18	+0.31	26.3	NORMAL
SHELBURNE 2	1995	6.09	-0.12	-0.59	5.18	0.48	-0.91	-189.6	BELOW NORMAL
WARNER 1	1965	31.08	-0.59	-1.54	31.28	1.74	+0.20	11.5	NORMAL

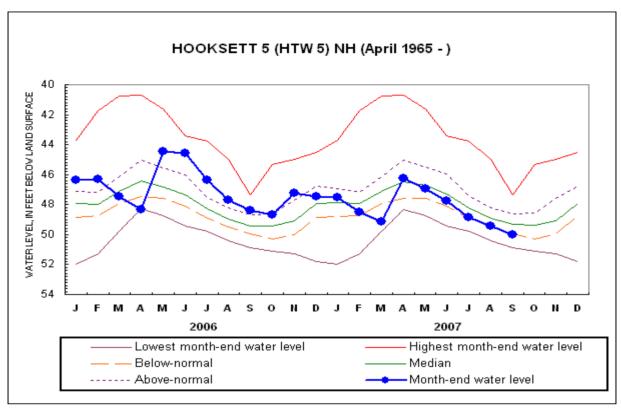
Source: USGS, NH DES

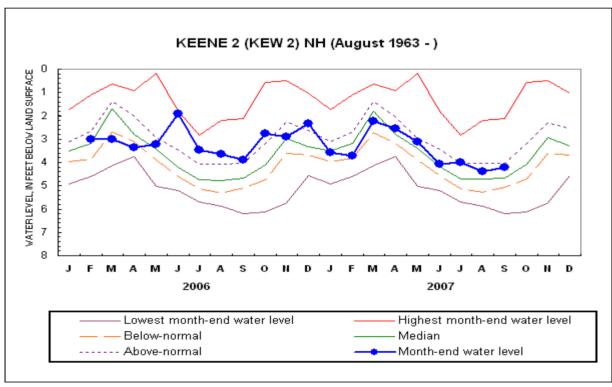


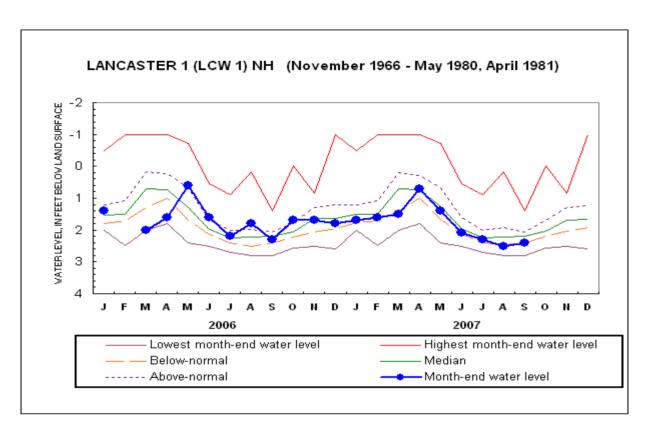


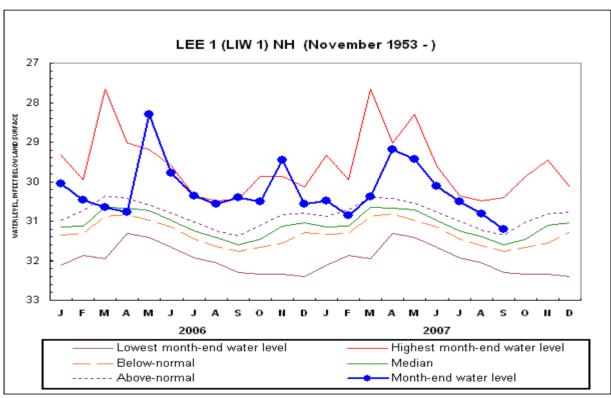


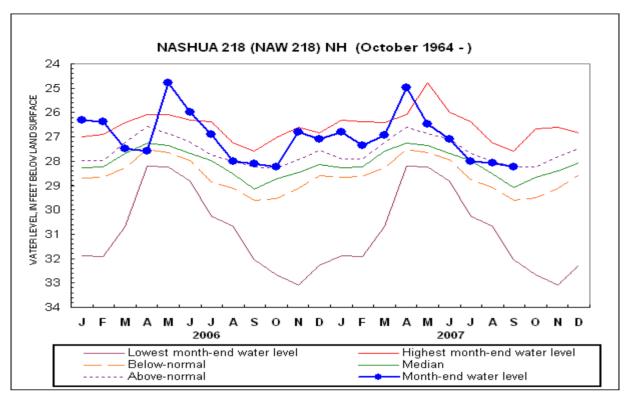


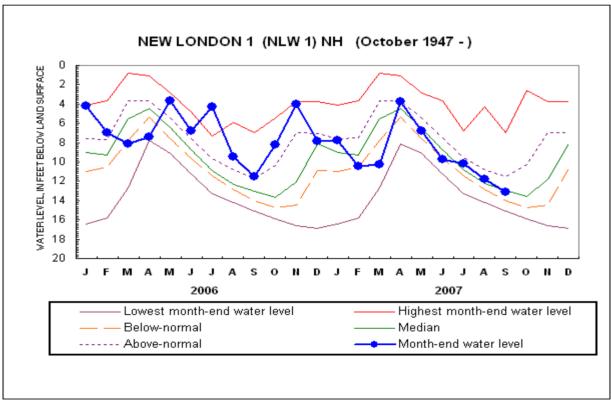


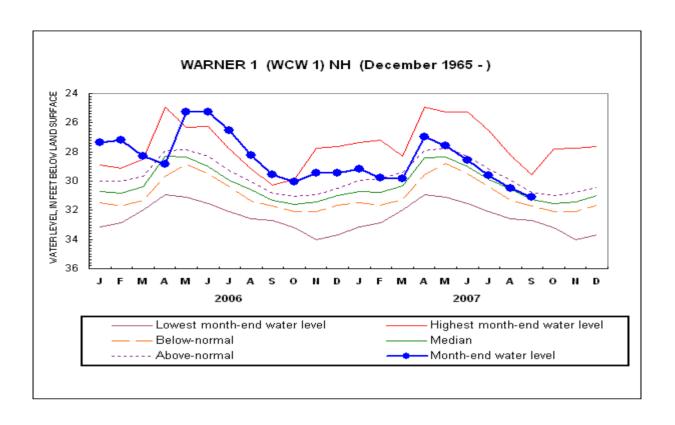






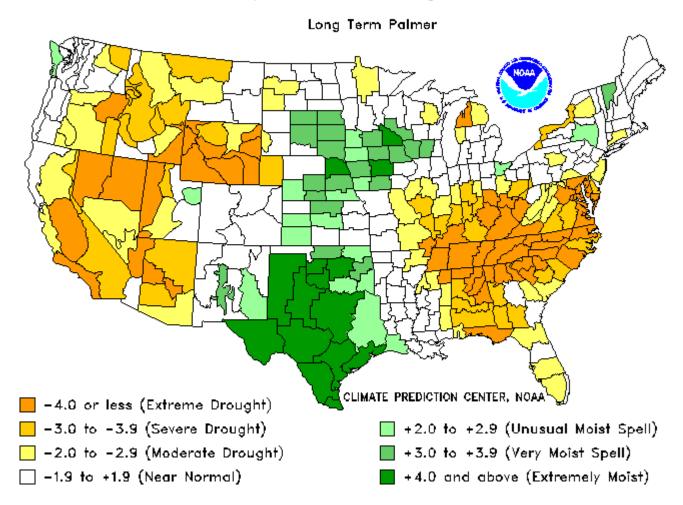






Drought Severity Index by Division

Weekly Value for Period Ending 13 OCT 2007

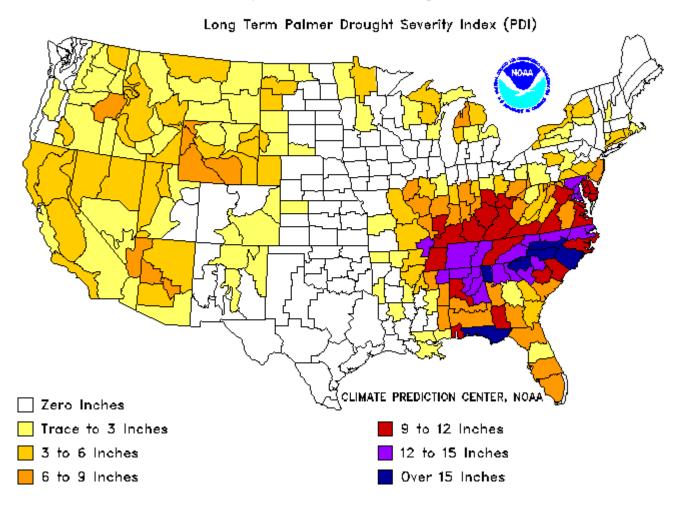


THE PALMER DROUGHT SEVERITY INDEX

The Palmer Index uses temperature and rainfall information in a formula to determine dryness. The advantage of the Palmer Index is that it is standardized to local climate.

Additional Precip. Needed (In.) to Bring PDI to -0.5

Weekly Value for Period Ending 13 OCT 2007



This is the amount of rainfall required in a week's time to bring the index back to zero inches required.